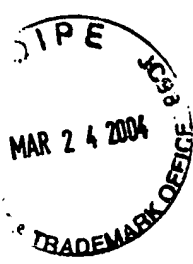


P24677.A01



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Ryutaro YAMANAKA et al.

Group Art Unit : Unknown

Appl. No : 10/748,242

Examiner: Unknown

Filed : December 31, 2003

For : PROCESSING UNIT AND PROCESSING METHOD

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure under 37 C.F.R. 1.56, 1.97-1.98, Applicants hereby call the following information to the Examiner's attention:

The following documents were cited by Applicants or the Examiner during the prosecution of great-grandparent Application No. 09/147,663 (issued December 11, 2001 as U.S. Patent No. 6,330,684) and/or the prosecution of grandparent Application No. 09/974,807 (issued as U.S. Patent No. 6,477,661 on November 5, 2002) and/or the prosecution of parent Application No. 10/252,394 (for which a Notice of Allowance was issued on October 31, 2003):

U.S. Patent No. 6,195,782 to RAHMATULLAH et al., issued on February 27, 2001;

U.S. Patent No. 6,257,756 to ZARUBINSKY et al., issued on July 10, 2001;

P24677.A01

U.S. Patent No. 6,477,661 to YAMANAKA (grandparent of the present application), issued on November 5, 2003;

U.S. Patent No. 5,633,897 to FETTWEIS et al., issued May 27, 1997;

Japanese Patent Publication No. 09-148943, to TAKASHI, published June 6, 1997, along with an English language abstract and an English language translation;

Japanese Patent Publication No. 63-215227 to SHINYA, published September 7, 1988, along with an English language abstract;

UEDA et al., "A 16-bit Digital Signal Processor with Specially Arranged Multiply-Accumulator for Low Power Consumption", IEICE Trans. Electron., Vol. E78-C, No. 12, December 1995;

H. LOU, "Viterbi Decoder Design for the IS-95 CDMA Forward Link", IEEE 46th Vehicular Technology Conference, No. 2, 1996, pp.1346-1350;

U.S. Patent No. 5,923,713 to HATAKEYAMA;

U.S. Patent No. 5,327,440 to FREDRICKSON et al.;

U.S. Patent No. 5,912,908 to CESARI et al.;

U.S. Patent No. 5,987,490 to ALIDINA et al.;

U.S. Patent No. 5,220,570 to LOU et al.;

U.S. Patent No. 5,414,738 to BIENZ;

U.S. Patent No. 5,710,784 to KINDRED et al.;

P24677.A01

U.S. Patent No. 5,027,374 to ROSSMAN;

U.S. Patent No. 4,606,027 to OTANI;

U.S. Patent No. 5,742,621 to AMON et al.;

A notice of the Decision for the Rejection issued March 26, 2002, in Japanese Published Patent Application No. H10-168567, which is a counterpart to the instant application, in which the following documents were cited:

Japanese Laid-Open Patent Publication No. 6-164423 to MURATA MACH LTD, published June 10, 1994, along with an English-language abstract;

Japanese Laid-Open Patent Publication No. 8-84082 to SONY CORP, published September 14, 1994, along with an English-language abstract;

Japanese Laid-Open Patent Publication No. 9-148943 to NEC CORP, published November 17, 1995, along with an English-language abstract;

Japanese Laid-Open Patent Publication No. 10-107651 to NEC CORP., published April 24, 1998, along with an English language abstract;

Japanese Laid-Open Patent Publication No. 10-209882 to JAPAN RADIO CO. LTD., published August 7, 1998, along with an English language abstract;

Japanese Laid-Open Patent Publication No. 11-55130 to OKI ELECTRIC IND. CO. LTD., published February 26, 1999, along with an English language abstract;

U.S. Patent No. 6,263,474, to WATANABE, issued July 17, 2001, based upon

P24677.A01

commonly assigned U.S. Patent Application No. 09/158,799;

U.S. Patent No. 5,881,106 to CARTIER, issued on March 9, 1999;

U.S. Patent No. 6,330,684 to YAMANAKA et al. (great-grandparent to the present application), issued December 2001;

U.S. Patent No. 5,809,071 to KOBAYASHI et al., issued September 1998;

U.S. Patent No. 5,509,021 to TODOROKI, issued April 1996;

U.S. Patent No. 5,502,735 to COOPER, issued March 1996;

U.S. Patent No. 5,375,129 to COOPER, issued December 1994;

U.S. Patent No. 5,379,306 to NOMA et al., issued January 1995;

U.S. Patent No. 4,614,933 to YAMASHITA et al., issued September 1986.

U.S. Patent No. 6,125,153 to SUGISAWA et al., issued September 26, 2000.

Applicants respectfully request that the Examiner consider and cite these documents.

The above-noted documents were cited by either the Examiner or the Applicants in the prosecution of great-grandparent Application No. 09/147,663 (issued December 11, 2001 as U.S. Patent No. 6,330,684) and/or the prosecution of grandparent Application No. 09/974,807 (issued as U.S. Patent No. 6,477,661 on November 5, 2002) and/or the prosecution of parent Application No. 10/252,394 (for which a Notice of Allowance was issued on October 31, 2003), upon which the present application relies for an earlier filing date under 35 U.S.C. §120. Accordingly, copies of each of the above-noted publications are

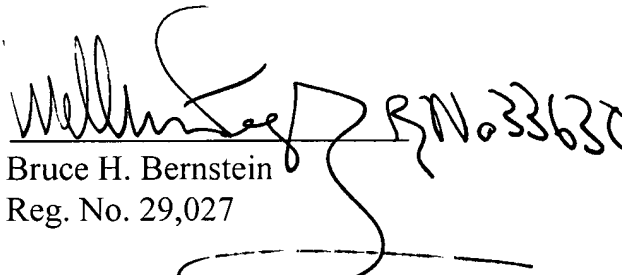
P24677.A01

not attached pursuant to 37 C.F.R. §1.98(d).

Applicants respectfully request that the Examiner consider and cite the above materials and cite the patent documents and publications. Each of the above-noted documents have been listed on a PTO-1449 Form which is attached hereto. The Examiner is respectfully requested to consider each cited document and to indicate such consideration by appropriately initialing the enclosed PTO-1449 form and returning a copy of the initialed form with the next communication.

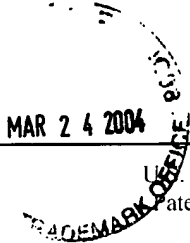
Should there be any questions or comments, the Examiner is respectfully invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
Ryutaro YAMANAKA et al.

  
Bruce H. Bernstein  
Reg. No. 29,027

March 22, 2004  
GREENBLUM & BERNSTEIN, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191  
(703) 716-1191

MAR 24 2004



Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. P24677	Serial No. Unknown
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use several sheets if necessary)		Applicant Ryutaro YAMANAKA et al	
		Filing Date December 31, 2003	Group Unknown

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6 1 9 5 7 8 2	02/27/01	RAHMATULLAH et al			
	6 2 5 7 7 5 6	07/10/01	ZARUBINSKY et al			
	6 4 7 7 6 6 1	11/05/03	YAMANAKA			
	5 6 3 3 8 9 7	05/27/97	FETTWEIS et al			
	5 9 2 3 7 1 3	07/1999	HATAKEYAMA			
	5 3 2 7 4 4 0	07/1999	FREDRICKSON et al			
	5 9 1 2 9 0 8	06/1999	CESARI et al			
	5 9 8 7 4 9 0	11/1993	ALIDINA et al			
	5 2 2 0 5 7 0	06/1993	LOU et al			
	5 4 1 4 7 3 8	05/1995	BIENZ			
	5 7 1 0 7 8 4	01/1998	KINDRED et al			
	5 0 2 7 3 7 4	01/1991	ROSSMAN			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
0	9 - 1 4 8 9 4 3	06/06/97	JAPAN			X
6	3 - 2 1 5 2 2 7	09/07/88	JAPAN			X
	6 - 1 6 4 4 2 3	06/10/94	JAPAN			
	8 - 8 4 0 8 2	09/14/94	JAPAN			
	9 - 1 4 8 9 4 3	11/17/95	JAPAN			
1	0 - 1 0 7 6 5 1	04/24/98	JAPAN			

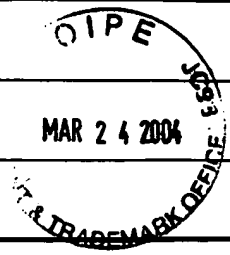
## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

1	English Language Abstract JP 09-148943.
2	English Language Abstract JP 63-215227.
3	UEDA et al., "A 16-bit Digital Signal Processor with Specially Arranged Multiply-Accumulator for Low Power Consumption",
	IEICE Trans. Electron., Vol. E78-C, No. 12, December 1995.

EXAMINER	DATE CONSIDERED
----------	-----------------

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. P24677	Serial No. Unknown
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use several sheets if necessary)		Applicant Ryutaro YAMANAKA et al	
		Filing Date December 31, 2003	Group Unknown

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4 6 0 6 0 2 7	09/1986	OTANI			
	5 7 4 2 6 2 1	08/1998	AMON et al			
	6 2 6 3 4 7 4	07/17/01	WATANABE			
	5 8 8 1 1 0 6	03/09/99	CARTIER			
	6 3 3 0 6 8 4	12/2001	YAMANAKA et al			
	5 8 0 9 0 7 1	09/1998	KOBAYASHI et al			
	5 5 0 9 0 2 1	04/1996	TODOROKI			
	5 5 0 2 7 3 5	03/1996	COOPER			
	5 3 7 5 1 2 9	12/1994	COOPER			
	5 3 7 9 3 0 6	01/1995	NOMA et al			
	4 6 1 4 9 3 3	09/1986	YAMASHITA et al			
	6 1 2 5 1 5 3	09/26/00	SUGISAWA et al			

**FOREIGN PATENT DOCUMENTS**

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
1 0 - 2 0 9 8 8 2	08/07/98	JAPAN			
1 1 - 5 5 1 3 0	02/26/99	JAPAN			

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

4	H. LOU, "Viterbi Decoder Design for the IS-95 CDMA Forward Link", IEEE 46th Vehicular Technology Conference, No. 2, 1996, pp.1346-1350.
5	English Language Abstract of JP6-164423.
6	English Language Abstract of JP8-84082.
7	English Language Abstract of JP9-148943.
8	English Language Abstract of JP10-107651.
9	English Language Abstract of 10-209882.
1 0	English Language Abstract of 11-55130.

EXAMINER

DATE CONSIDERED

\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.